

GS (E pL pH fn [parameters]

[Name] Set user setup commands

- [Description]
- Controls the user setting modes.
 - pL, pH specify (pL + pH ×256) as the number of bytes after pH (fn and [parameters]).
 - fn specifies the function.
 - [parameters] specify the process of each function.

<i>fn</i>	Format	Function No.	Function name
1	GS (E pL pH fn d1 d2	1	Change into the user setting mode.
2	GS (E pL pH fn d1 d2 d3	2	End the user setting mode session.
3	GS (E pL pH fn [a1 b18... b11] ... [ak bk8... bk1]	3	Change the settings of the memory switch.
4	GS (E pL pH fn a	4	Transmit the settings of the memory switch.
5	GS (E pL pH fn [a1 n1L n1H] ... [ak nkL nkH]	5	Set the customized setting values.
6	GS (E pL pH fn a	6	Transmit the customized setting values.

- [Notes]
- Frequent write command executions by an NV memory write command may damage the NV memory. Therefore, it is recommended to write to the NV memory less than 10 times a day.
 - If the power is turned off while this command is being executed, the printer may go into an abnormal condition. Be careful not to turn the power off while this command is being executed.
 - While processing this command, the printer is BUSY while writing the data to the NV memory and stops receiving data. Therefore, be sure not to transmit data, including the real-time commands, while the printer is BUSY.
 - When <Function 1, 4, or 6> is transmitted, the data following must not be transmitted until the status is received.

EPSON	TITLE TM-H6000III Specification (STANDARD)	SHEET REVISION A	NO.	
			NEXT 128	SHEET 127

<Function 1> **GS (E pL pH fn d1 d2 (fn = 1)**

[Name]	Change into the user setting mode								
[Format]	ASCII	GS	(E	pL	pH	fn	d1	d2
	Hex	1D	28	45	pL	pH	fn	d1	d2
	Decimal	29	40	69	pL	pH	fn	d1	d2
[Range]	$(pL + pH \times 256) = 3$ (pL = 3 , pH = 0) fn = 1 d1 = 73 d2 = 78								
[Description]	<ul style="list-style-type: none"> Enters the user setting mode and transmits the mode change notice. 								

<Function 2> **GS (E pL pH fn d1 d2 d3 (fn = 2)**

[Name]	End the user setting mode session									
[Format]	ASCII	GS	(E	pL	pH	fn	d1	d2	d3
	Hex	1D	28	45	pL	pH	fn	d1	d2	d3
	Decimal	29	40	69	pL	pH	fn	d1	d2	d3
[Range]	$(pL + pH \times 256) = 4$ (pL = 4 , pH = 0) fn = 2 d1 = 79 d2 = 85 d3 = 84									
[Description]	<ul style="list-style-type: none"> Ends the user setting mode and performs a software reset. Clears the receive and print buffers. Resets all setting values in RAM (the print area, the character styles, and others) that were in effect at power on. (The data in the NV memory are not reset.) 									

EPSON	TITLE TM-H6000III Specification (STANDARD)	SHEET REVISION A	NO.	
			NEXT 129	SHEET 128

<Function 3> **GS (E pL pH fn [a1 b18...b11]...[ak bk8...bk1] (fn = 3)**

[Name] Change the settings of the memory switch

[Format] ASCII GS (E pL pH fn [a1 b18 ... b11] ... [ak bk8 ... bk1]
 Hex 1D 28 45 pL pH fn [a1 b18 ... b11] ... [ak bk8 ... bk1]
 Decimal 29 40 69 pL pH fn [a1 b18 ... b11] ... [ak bk8 ... bk1]

[Range] $10 \leq (pL + pH \times 256) \leq 65530$ ($0 \leq pL \leq 255$, $0 \leq pH \leq 255$)
 $fn = 3$
 $a = 1, 8$
 $48 \leq b \leq 50$

[Default (upon shipment)] All settings are Off ($b = 48$).

- [Description]
- Changes the settings of the memory switch specified by a to the values specified by b .
 - When $b = 48$, the applicable bit is turned Off.
 - When $b = 49$, the applicable bit is turned On.
 - When $b = 50$, the applicable bit is not changed. Set $b = 50$ as the reserved bit.

• Memory switch 1 (Msw 1: $a = 1$)

Msw	Function	Setting value
1-1	Does not transmit the power-on notice.	48
	Transmits the power-on notice when processing an initialization.	49
1-2 - 1-8	Reserved.	50

• Memory switch 8 (Msw 8: $a = 8$)

Msw	Function	Setting value
8-1 - 8-3	Reserved.	50
8-4	Selects single-color print control.	48
	Selects two-color print control.	49
8-5	Reserved.	50
8-6	Outputs the ERROR signal when an error occurs.	48
	Does not output the ERROR signal when an error occurs.	49
8-7	Slip paper jam detection: Enabled	48
	Slip paper jam detection: Disabled	49
8-8	Goes offline if the unit is opened during printing.	48
	Changes to a recoverable error, even if the unit is opened during printing.	49

[Msw 8-4]: When "two-color print control" is selected, the use of single-color thermal paper is prohibited.

[Msw 8-6]: Enabled in the parallel interface model.

EPSON	TITLE TM-H6000III Specification (STANDARD)	SHEET REVISION A	NO.	
			NEXT 130	SHEET 129

<Function 4> **GS (E pL pH fn a (fn = 4)**

[Name] Transmit the settings of the memory switch

[Format] ASCII GS (E pL pH fn a
 Hex 1D 28 45 pL pH fn a
 Decimal 29 40 69 pL pH fn a

[Range] $(pL + pH \times 256) = 2$ ($pL = 2, pH = 0$)
 $fn = 4$
 $a = 1, 8$

[Description] • Transmits the setting value of the memory switch specified by a.

<Function 5> **GS (E pL pH fn [a1 n1L n1H]...[ak nkL nkH] (fn = 5)**

[Name] Set the customized setting values

[Format] ASCII GS (E pL pH fn [a1 n1L n1H]... [ak nkL nkH]
 Hex 1D 28 45 pL pH fn [a1 n1L n1H]... [ak nkL nkH]
 Decimal 29 40 69 pL pH fn [a1 n1L n1H]... [ak nkL nkH]

[Range] $4 \leq (pL + pH \times 256) \leq 65533$ ($0 \leq pL \leq 255, 0 \leq pH \leq 255$)
 $fn = 5$
 $a = 1, 2, 5, 118$
 $1 \leq (nL + nH \times 256) \leq 4$ ($1 \leq nL \leq 4, nH = 0$) [when a = 1]
 $1 \leq (nL + nH \times 256) \leq 7$ ($1 \leq nL \leq 7, nH = 0$) [when a = 2]
 $0 \leq (nL + nH \times 256) \leq 6, (nL + nH \times 256) = 100, 65530 \leq (nL + nH \times 256) \leq 65535$
 ($0 \leq nL \leq 6, nL = 100, nH = 0, 250 \leq nL \leq 255, nH = 255$) [when a = 5]
 $(nL + nH \times 256) = 70, 85, 100$ ($nL = 70, 85, 100, nH = 0$) [when a = 118]

[Default (upon shipment)]
 $(nL + nH \times 256) = 1$ ($nL = 1, nH = 0$) [when a = 1]
 $(nL + nH \times 256) = 7$ ($nL = 7, nH = 0$) [when a = 2]
 $(nL + nH \times 256) = 100$ ($nL = 100, nH = 0$) [when a = 5]
 $(nL + nH \times 256) = 85$ ($nL = 85, nH = 0$) [when a = 118]

[Description] • Sets the customized value specified by a to the values specified by $(nL + nH \times 256)$.

a	Type of customized value
1	NV user memory capacity
2	NV graphics memory capacity
5	Print density
118	Black-color density in two-color printing

EPSON	TITLE TM-H6000III Specification (STANDARD)	SHEET REVISION A	NO.	
			NEXT 131	SHEET 130

• NV user memory capacity setting (a = 1)

(nL + nH × 256)	NV user memory capacity
1	1KB
2	64KB
3	128KB
4	192KB

• NV graphics memory capacity setting (a = 2)

(nL + nH × 256)	NV graphics memory capacity
1 (*)	None (0 bytes)
2	64KB
3	128KB
4	192KB
5	256KB
6	320KB
7	384KB

(*) With this setting the printer cannot use the NV graphics function.

• Print density setting (a = 5)

(nL + nH × 256)	Print density	
100	Density level depending on the DIP switch settings	
65530	70 %	light
65531	75 %	
65532	80 %	
65533	85 %	
65534	90 %	
65535	95 %	
0	100 %	
1	105 %	
2	110 %	
3	115 %	
4	120 %	
5	125 %	
6	130 %	dark

- Black-color density in two-color printing ($a = 118$)

$(nL + nH \times 256)$	Black-color density
70	Light
85	Medium
100	Dark

^(*) The black-color density is affected only in two-color printing.

[Notes]

- If the either one of the setting values $a = 1$ or $a = 2$ is changed, the data in both areas (the NV user memory and the NV graphics memory) is cleared.
- The combinations that can be specified for the NV user memory capacity and the NV graphic memory capacity with $a = 1$ and $a = 2$ are as shown in the table below. Even if the printer receives an impossible combination, the printer automatically sets a possible combination for each memory size.

Memory size of NV user memory	Memory size of NV graphic memory
1KB	384KB or less
64KB	256KB or less
128KB	128KB or less
192KB	0

<Function 6> **GS (E pL pH fn a ($fn = 6$))**

[Name] Transmit the customized setting values

[Format] ASCII GS (E pL pH fn a
 Hex 1D 28 45 pL pH fn a
 Decimal 29 40 69 pL pH fn a

[Range] $(pL + pH \times 256) = 2$ ($pL = 2$, $pH = 0$)
 $fn = 6$
 $a = 1, 2, 5, 118$

[Description] • Transmits the customized value specified by a .

a	Type of customized value
1	NV user memory capacity
2	NV graphics memory capacity
5	Print density
118	Black-color density in two-color printing